

# Machine Disassembly and Replacement

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This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

- Wrist grounding strap and conductive mat for preventing electrostatic discharge
- Small Philips screw driver
- Philips screwdriver
- Plastic flat head screw driver
- Tweezers

**NOTE:** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

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# General Information

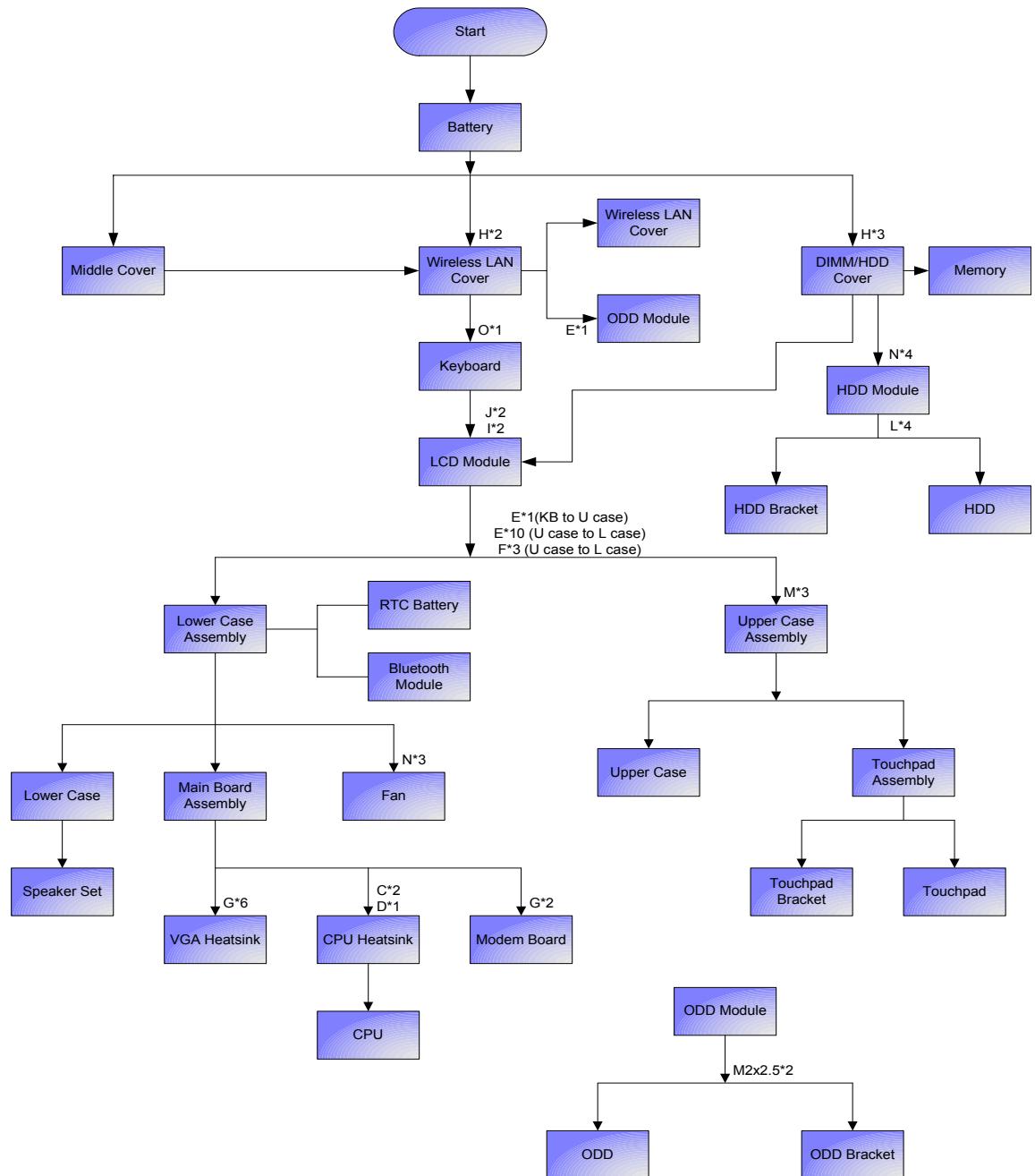
## Before You Begin

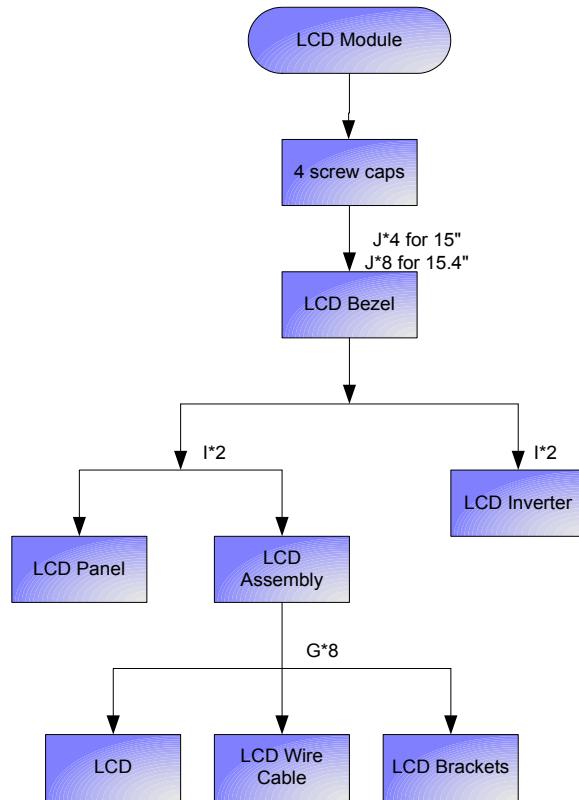
Before proceeding with the disassembly procedure, make sure that you do the following:

1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Remove the battery pack.

# Disassembly Procedure Flowchart

The flowchart on the succeeding page gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the system board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.





### Screw List

Item	Description	Part No.
A	SCW HEX NYL I#R-40/O#4-40 L5.5	34.00015.081
B	SCREW MACH WAFER M2*L4 NI	86.00059.220
C	CPU SCREW M2.5*6.5 (2.7KG)	86.00C79.230
D	CPU SCREW M2.5*6.5 (4.5KG)	86.00C80.230
E	SCREW M2.5-6	86.9A323.6R0
F	SCRW M2.5*L8(NON NYLOK)	86.9A323.8R0
G	SCREW M2*3 NYLON 1JMCPC-420325	86.9A352.3R0
H	SCREW	86.9A352.4R0
I	SCREW M2.5*4L(NYLOCK)BLACK ZN	86.9A353.4R0
J	SCREW M2.5X6	86.9A353.6R0
K	SRW M2.5*8L B/ZN NYLOK 700	86.9A353.8R0
L	SCREW M3x4(86.9A524.4R0)	86.9A524.4R0
M	SCREW WAFER NYLOK NI 2ML3	86.9A552.3R0
N	SCRW M2*4 WAFER NI	86.9A552.4R0
O	SCRW M2.5*3 WAFER NI	86.9A553.3R0

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## Removing the Battery Pack

1. Unlock the battery lock.
2. Slide the battery latch then remove the battery.



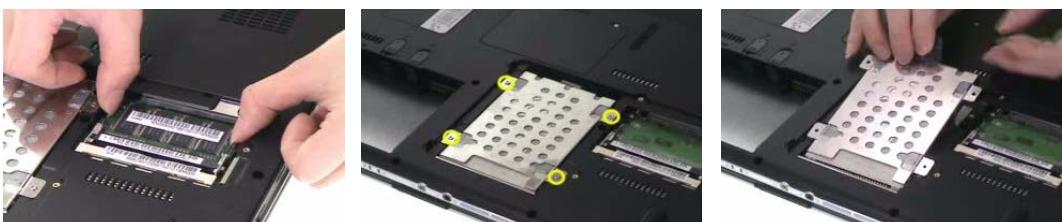
# Removing the Memory/the HDD Module/the Wireless LAN Card/the ODD Module and the LCD Module

## Removing the Memory and the HDD Module

1. Remove the three screws fastening the DIMM/HDD cover.
2. Detach the DIMM/HDD cover carefully.



3. Pop out the memory then remove it.
4. Remove four screws fastening the HDD module.
5. Pull the HDD module backwards then detach it.

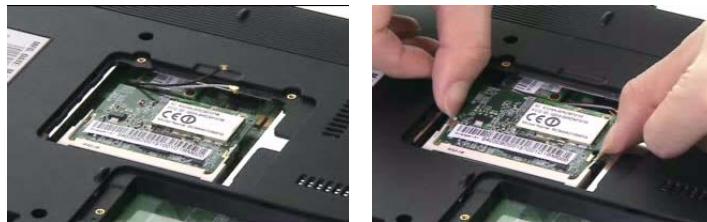


## Removing the Wireless LAN Card

1. Remove the two screws fastening the wireless LAN cover.
2. Then detach the wireless LAN cover.

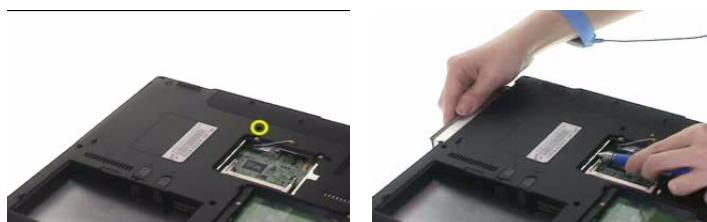


3. Disconnect the main and the auxiliary antennae.
4. Pop out the wireless LAN card then remove it.



## Removing the ODD Module

1. Remove the screws fastening the ODD module as shown.
  2. Use a flat headed screwdriver to push the ODD module outwards then remove it.
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## Removing the LCD Module

1. Open the notebook as the image shows.
  2. Detach the middle cover carefully as shown.
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3. Remove the screw holding the keyboard.
4. Turn over the keyboard as shown.
5. Disconnect the keyboard cable then remove the keyboard.



6. Pull out the wireless LAN antenna from the main unit as shown.

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7. Take out the LCD cable from the main unit then disconnect the cable.



8. Remove two screws fastening the LCD module.
9. Remove another two screws on the bottom as shown.
10. Then detach the entire LCD module cautiously.



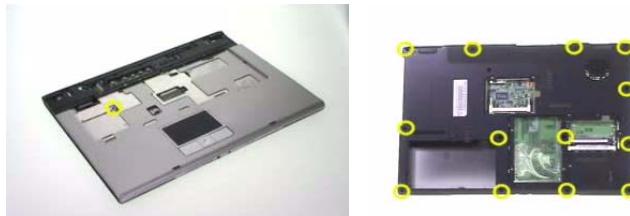
# Disassembling the Main Unit

## Separate the Main Unit Into the Upper and the Lower Case Assembly

1. Disconnect the touchpad cable from the main board.
2. Disconnect the microphone cable then remove the microphone.



3. Remove one screw holding the upper case and the lower case assembly.
4. Then remove 13 screws on the bottom as shown.



**NOTE:** There are two different types of screws on the bottom side. One type is SCREW 2.5-6 (86.9A323.6R0) and the quantity is 10. The other is SCREW M2.5\*8 (NON NYLOK) (86.9A323.8R0); the quantity is 3. Please see the image below: red circles indicate SCREW M2.5\*8 (86.9A323.8R0) location. Please do not misplace the longer screw to other location on the bottom side. The misplacement may damage the main board.

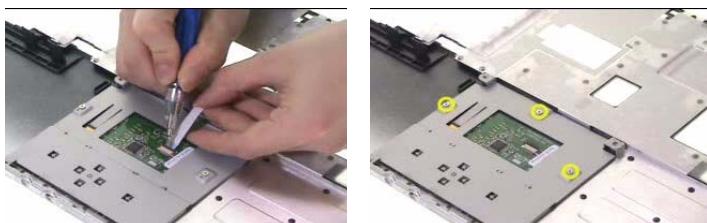


5. Open the upper case assembly as shown.
6. After you open the upper case assembly, please disconnect the lid switch cable.
7. Raise upright the upper case assembly as shown then detach it.

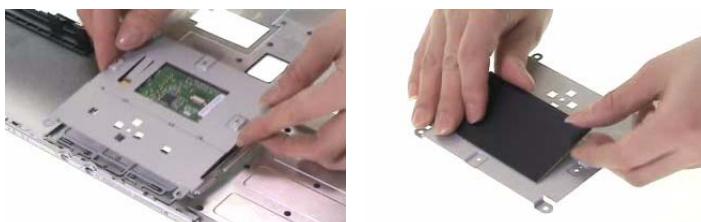


## Disassembling the Upper Case Assembly

1. Disconnect the touchpad FFC.
2. Remove the three screws fastening the touchpad bracket.



3. Detach the touchpad bracket carefully.
4. Then detach the touchpad from the touchpad bracket.



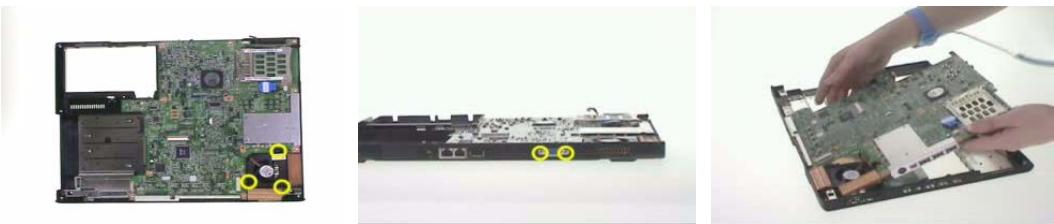
## Disassembling the Lower Case Assembly

1. Disconnect the bluetooth cable then remove the bluetooth module.
2. Disconnect the speaker set cable from the main board.
3. Remove two screws fastening the main board to the lower case.



4. Remove three screws fastening the fan to the lower case.

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5. Remove two hex screws holding the main board on the rear side.
  6. Then take out the main board from the lower case carefully.



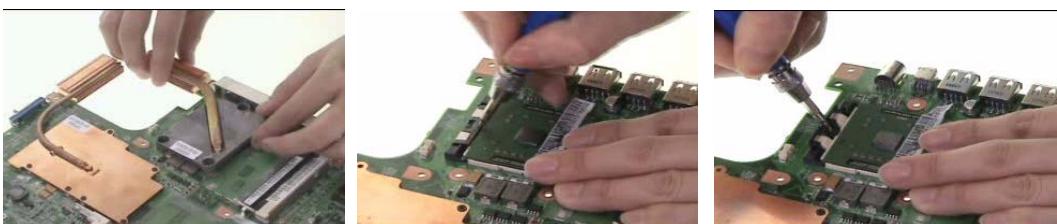
7. Disconnect the fan cable then remove it.
8. Disconnect the modem board cable from the main board.
9. Remove the two screws holding the modem board.



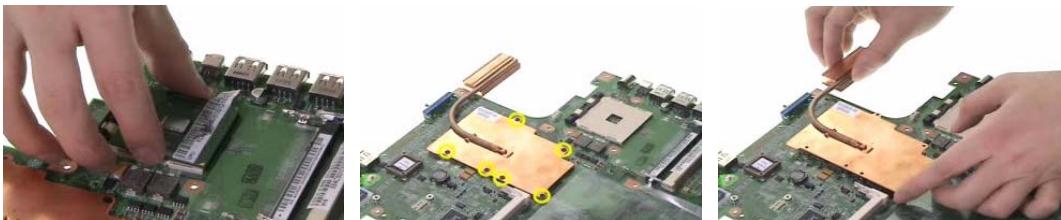
10. Disconnect the modem board from the main board then remove it.
11. Disconnect the modem cable from the modem board.
12. Remove the three screws holding the CPU heatsink.



13. Remove the CPU heatsink from the main board.
14. Use a flat headed screwdriver to release the CPU socket lock (see the picture on the middle and on the right).



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- 15.** Remove the CPU from the socket carefully.
  - 16.** Remove the six screws fastening the VGA heatsink.
  - 17.** Then remove the VGA heatsink from the main board.



- 18.** Remove the three screws fastening the speaker set.
- 19.** Tear off the tape holding the speaker set.
- 20.** Take out the speaker set from the lower case. This completes main unit disassembly.



## Disassembling the LCD Module

1. Remove the four screw caps as shown.
2. Remove the four screws holding the LCD bezel.
3. Then detach the LCD bezel from the LCD module.



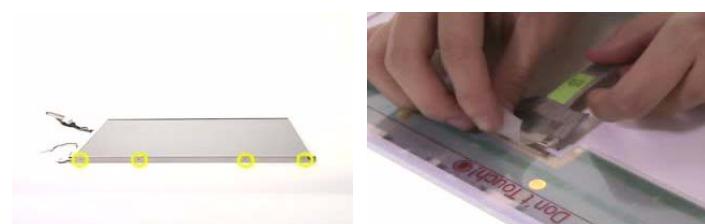
4. Remove the two screws fastening the LCD inverter.
5. Take out the LCD inverter from the LCD cover, then disconnect the LCD cable from the inverter.
6. Disconnect the inverter cable and remove the inverter.



7. Remove two screws fastening the LCD assembly.
8. Take out the LCD assembly from Remove another screw holding the LCD bracket on the other side.
9. Remove the four screws fastening the LCD left bracket then remove it.



10. Remove the four screws fastening the LCD right bracket then remove the bracket.
11. Disconnect the LCD cable from the LCD then remove the cable.



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# Disassembling the External Modules

## Disassembling the HDD Module

1. Remove the two screws holding the HDD bracket on one side.
2. Remove another two screws holding the HDD bracket on the other side.
3. Then take the hard disc drive out from the HDD bracket.

